

**Claims:**

1. A glutamine-auxotrophic human cell transfected with an exogenous DNA sequence encoding a protein or an exogenous DNA sequence capable of altering the expression of an endogenous gene encoding a protein and an exogenous DNA sequence encoding a glutamine synthetase, wherein these exogenous DNA sequences are located on one or more than one DNA construct, said transfected cell capable of producing said protein and capable of growing in a glutamine-free medium.
2. The glutamine-auxotrophic human cell of claim 1, wherein the exogenous DNA sequences are located on more than one DNA construct.
3. The glutamine-auxotrophic human cell of any of claim 1 or 2, wherein the glutamine-auxotrophic human cell is an immortalized glutamine-auxotrophic human cell.
4. The glutamine-auxotrophic human cell of claim 3, wherein the immortalized glutamine-auxotrophic human cell is a human fibrosarcoma cell.
5. The glutamine-auxotrophic human cell of claim 4, wherein the human fibrosarcoma cell is a HT1080 cell line.
6. The glutamine-auxotrophic human cell of claim 1 to 5, wherein the transfected cell is anchorage-independent and capable of growing in suspension in serum-free, glutamine-free medium.
7. A process for the production of a protein comprising the steps of
  - a) culturing a glutamine-auxotrophic human cell according to claim 1 in a culture medium under conditions suitable for expression of said protein and
  - b) recovering said protein.
8. The process of claim 7 wherein the protein is a glycosylated protein.

9. The use of a glutamine synthetase as a selectable marker in glutamine-auxotrophic human cells.